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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,949	06/17/2005	Koji Tanaka	17/06/2005	6825

110 7590 03/27/2007  
 DANN, DORFMAN, HERRELL & SKILLMAN  
 1601 MARKET STREET  
 SUITE 2400  
 PHILADELPHIA, PA 19103-2307

EXAMINER
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NGUYEN, KIMBINH T

ART UNIT	PAPER NUMBER
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2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,949	<b>Applicant(s)</b> TANAKA ET AL.	
	<b>Examiner</b> Kimbinh T. Nguyen	<b>Art Unit</b> 2628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-7 are pending in the application.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Razdan et al. US 2005/0168460 A1 in view of Arika, JP Application number 10-224115.

Claim 1, Razdan et al. discloses a three-dimensional shape data acquisition unit (data acquisition device 130; fig. 1) for acquiring the three-dimensional shape data stored in a data storage unit (3D acquired data 122; fig. 1; paragraphs 0086, 0090, 0098, 0099); a three-dimensional shape information generation unit for generating, on said shape element basis, various types of shape information related to each shape element (paragraphs 0086, 0090, 0099); a linkage identifier setup unit for adding linkage identifiers to link (a master identification number for use as the key to link data elements), for each element, among said various types of shape information, when generating the shape information (paragraph 0091); Razdan does not teach storing the shape information having the linkage identifiers; however, Akira teaches a shape information storing unit for storing said shape information having said linkage identifiers in the data storage unit (3D CAD data stored in the storing means 3; paragraph 0031);

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and a shape information linkage control unit (control section 11) for, while referring to said linkage identifiers, linking and processing among said various types of shape information related to a particular shape element (paragraph 0032). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the linkage information taught by Arika into the 3D data acquisition means of Razdan, because it would reduce quantity of data transfer for 3D configuration retrieval (paragraph 0065).

Claim 4, Arika discloses said linkage identifier setup unit generates linkage identifiers based on information concerning said shape elements included in said three-dimensional shape data (claim 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the linkage information taught by Arika into the 3D data acquisition means of Razdan, because it would reduce quantity of data transfer for 3D configuration retrieval (paragraph 0065).

Claim 5, Arika discloses said shape information linkage control unit comprises a plurality of information processing modules for displaying said shape information, and a linkage control module connected to said plurality of information processing modules, wherein upon the indication of a specific shape element related to the shape information displayed by said information processing modules, the linkage identifier corresponding to that shape element is sent to said linkage control module, and in turn, said linkage control module sends said identifier to each information processing module so that each information processing module changes, by a specified method, its display for the shape elements that correspond to said identifier (paragraphs 0032-0037). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the linkage control section taught by Arika into the 3D data acquisition means of Razdan, because it would reduce quantity of data transfer for 3D configuration retrieval (paragraph 0065).

Claim 6, the rationale provided in the rejection of claim 1 is incorporated herein.

Claim 7, the rationale provided in the rejection of claim 1 is incorporated herein. In addition, Razdan et al. teaches a computer software program for acquiring shape information from 3D shape data using a computer system comprising a computer readable medium (paragraphs 0091,0092).

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Razdan et al. US 2005/0168460 A1 in view of Arika, JP Application number 10-224115 and further in view of Dessureault et al. (7,065,476).

Claim 2, Dessureault et al. discloses the three-dimensional shape information generation unit successively acquires, based on the physical and logical organizations of said three-dimensional shape data (col. 7, lines 40-61), each type of shape information related to said shape elements making up such physical and logical organizations (col. 9, line 46 through col. 10, line 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the shape information related to said shape elements making up such physical and logical organizations taught by Dessureault into the 3D data acquisition means of Razdan, because it would provide for the ability to easily resize the dimensions for the component and/or to lookup/replace components with similar function and properties

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(col. 7, lines 55-57).

Claim 3, Dessureault et al. discloses said three-dimensional shape information generation unit acquires, on said shape element basis, information regarding the shape element's name, attributes, two-dimensional vector data, and image data as said shape information(col. 7, lines 19-30). ). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the shape information taught by Dessureault into the 3D data acquisition means of Razdan, because it would provide for the ability to easily resize the dimensions for the component and/or to lookup/replace components with similar function and properties (col. 7, lines 55-57).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached at (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

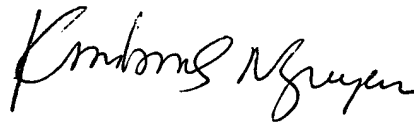
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

March 20, 2007

A handwritten signature in black ink, appearing to read "Kimbinh T. Nguyen". The signature is written in a cursive, flowing style.

**KIMBINH T. NGUYEN**  
**PRIMARY EXAMINER**